

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Poul Erik Braad Examiner: O Hern, Brent T.
Serial No.: 10/572,190 Group Art Unit: 1794
Filed: March 31, 2006 Docket No.: 13261.0030USWO
Title: **A Flexible Unbonded Pipe and a Method for Producing Such Pipe**

FIRST RESPONSE

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Responsive to the Office action dated July 25, 2008 in the patent application identified above, the applicant hereby elects Group I for further examination in the present application. This election is with traverse, as the restriction requirement is erroneous.

The error in the restriction requirement made by the Examiner is that Claim 1 is neither anticipated by nor obvious over *Strassel* (US 5,601,893) or *Giraud* (5,556,673). Accordingly, the stated reason that Groups I and II do not relate to a single inventive concept under PCT Rule 13.1 is not present, and the restriction requirement should be withdrawn.

The Examiner's assertion that Claim 1 is obvious or anticipated by *Strassel* or *Giraud* is unaccompanied by any analysis of that claim or of the supposed relevant teachings in either reference. For that reason, the applicant is unable to provide any specific rebuttal and, accordingly, traverses the asserted obviousness or anticipation. Notwithstanding, the applicant provides the following comments on those two references in an effort to advance prosecution of the present application.

Strassel describes a flexible pipe comprising an intermediate elastomer layer between a shrinkable polymer sheath and a metal pipe. The intermediate elastomer layer should cover and at least partially penetrate interstitial spaces in the metal pipe to reduce or avoid penetration of the shrinkable polymer sheath into the interstitial spaces. *Strassel* mentions that the intermediate elastomer layer can envelope the metal layer (Column 3, Lines 31-45). The reference also mentions that the shrinkable polymer sheath can have a thickness between 3 and 15 mm (Column 10, Lines 17-20) and the intermediate polymer can have a thickness between 0.1-2 mm (Column 12, Lines 3-5).

Strassel does not mention that the intermediate polymer and the shrinkable polymer sheath are bonded to each other, as stated in Claim 1. Neither does *Strassel* mention anything about permeability properties nor teach the specific fluid permeation barrier recited in Claim 1. Moreover, in general the more soft a polymer layer is, the more permeable it will be, and in all the examples given by *Strassel*, the intermediate elastomer layer clearly provides a fluid permeation which is much less than the fluid permeation for the shrinkable polymer sheath.

Turning to *Giraud*, that reference discloses a transparent composite structural member capable of withstanding mechanical stresses. The composite structural member comprises at least one transparent glass member, transparent fibers, and a cured transparent resin in which the fibers are embedded and in which the transparent glass member is also embedded. Example 1 of *Giraud* shows the structural member embodied in a tubular member (Figs. 1 and 2) comprising a glass tube (A1) with a thickness of 4 mm, surrounded by filamentary windings of glass fibers (B) impregnated by a curable resin (C) bonded to each other by an intermediate layer (D). *Giraud* does not mention the thickness of the layer B-C, and does not state the permeability for any of the materials. However, it is highly unlikely that the B-C layer should provide a fluid

permeation which is higher than the fluid permeation for the glass tube. Furthermore, the glass tube A1 is not a polymer.

Further yet, *Giraud* teaches structural elements “having...compressive, tensile and flexural strength, rigidity, and absence of brittleness” (Column 1, Lines 10-11) and intended to replace conventional structures made of metal or reinforced concrete (Column 1, Lines 13-14). The present invention, in contrast with *Giraud*, relates to a flexible unbonded pipe and a process for its preparation, with the pipe being particularly useful for the transportation of aggressive fluids and having increased stability towards corrosion while simultaneously maintaining high flexibility. Nothing in *Giraud* would suggest that one of ordinary skill modify the structural members of that reference to produce a flexible unbonded pipe, let alone a flexible unbonded pipe comprising the combination of elements recited in Claim 1.

For the foregoing reasons, the applicant respectfully requests that the restriction requirement be withdrawn and that examination on the merits take place with respect to Groups I and II.

Respectfully submitted,

MERCHANT & GOULD
P.O. Box 2903
Minneapolis, MN 55402-0903
Telephone: 404.954.5039

Date: August 5, 2008

/Roger T. Frost/
Roger T. Frost
Reg. No. 22,176

RTF/rjm

